

**PRELIMINARY/PARTIAL DRAFT Response to EPA Reaffirmed Objection Dated  
December 4, 2012 to the Proposed MDEQ Permit for the CR 595 Project**

**(SUBMITTED December 16, 2012 FOR MDEQ AND EPA REVIEW AND COMMENT)**

**Requirements for Minimization and Compensatory Mitigation to Satisfy EPA's Objection**

December 16, 2012

**1.0 Introduction**

In its letter and attachment thereto dated December 4, 2012, EPA removed a previously-stated objection to MDEQ permit issuance based upon the alternatives assessment for the proposed CR 595; however EPA reaffirmed its objection to permit issuance regarding the minimization of impacts and compensatory mitigation. This document addresses the EPA letter point-by-point and is intended to satisfy the reaffirmed objection of EPA for the CR 595 project so that the MDEQ permit can be issued and the EPA objection removed on or before the deadline of close-of-business January 3, 2012.

**2.0 Mitigation of Direct Impacts**

To demonstrate that the proposed stream and wetland mitigation will sufficiently compensate for proposed direct impacts, EPA is requiring that Marquette County Road Commission (MCRC) provide the items described in this section prior to the issuance of a permit by the MDEQ.

**2.1 Identification of a Third-Party Land Steward for the Long-Term Management of the Wetland Preservation Site**

MCRC is proposing to designate the Michigan Department of Natural Resources (MDNR) as the third-party steward for the proposed Dishno Creek Headwaters Wetland Preservation Area (preservation area). MDNR employs wildlife and fisheries biologist, forest and park managers that have extensive experience in managing natural areas and conducting ecological site improvements. MDNR owns and manages 4.5 million acres of land and six million acres of mineral rights. The largest state park (at 60,000 acres) is Porcupine Mountains Wilderness State Park located in the Western Upper Peninsula. MDNR also manages portion of other state parks as protected natural areas, including:

- Warren Dunes State Park (Great Lakes sand dunes and climax old-growth beech-maple forest);
- Grand Mere State Park (Great Lakes interdunal wetlands);
- Hartwick Pines State Park (virgin white pine forest);
- Craig Lake State Park (old-growth forest).

MDNR would serve as the third-party steward of the proposed preservation area in perpetuity, as it does with the millions of acres of other lands that it manages and

protects for the citizens of the State of Michigan. The only foreseeable exception would be if the subject preservation land is transferred at some time in the future to the US Forest Service to be added to the McCormick Wilderness, which is adjacent to two sides of the proposed preservation area. Adding lands to the McCormick Wilderness may take several years to accomplish and may involve the need for authorization by Congress.

MDNR would manage the proposed preservation area in strict compliance with the conservation easement and long-term management plan that has been prepared and submitted to MDEQ and EPA for approval. Prior to initiation of any permitted activities for the CR 595 project, MDNR will enter into a written agreement for serving as third-party steward, including financial assurances provided by MCRC or their agent for compensation of MDNR staff and other expenses related to the stewardship of the proposed preservation area.

## 2.2 Adaptive and Long-Term Management Plans for Stream and Wetland Mitigation

EPA is requiring that, prior to permit issuance, adaptive and long-term management plans for both stream and wetland mitigation, including monitoring and reporting schedule and funding mechanism, be implemented by the permittee.

40 C.F.R. § 230.97 (c) (Adaptive Management) and (d) (Long-Term Management), as stated below in *italics*, define the measures that must be taken for stream and wetland mitigation projects. It is assumed that reference to the “district engineer” should be replaced with “MDEQ” due to the Corps of Engineers District Engineer not being involved in the permitting of the CR 595 project.

### *Adaptive Management*

*(1) If the compensatory mitigation project cannot be constructed in accordance with the approved mitigation plans, the permittee or sponsor must notify the district engineer. A significant modification of the compensatory mitigation project requires approval from the district engineer.*

*(2) If monitoring or other information indicates that the compensatory mitigation project is not progressing towards meeting its performance standards as anticipated, the responsible party must notify the district engineer as soon as possible. The district engineer will evaluate and pursue measures to address deficiencies in the compensatory mitigation project. The district engineer will consider whether the compensatory mitigation project is providing ecological benefits comparable to the original objectives of the compensatory mitigation project.*

*(3) The district engineer, in consultation with the responsible party (and other federal, tribal, state, and local agencies, as appropriate), will determine the appropriate measures. The measures may include site modifications, design changes, revisions to maintenance requirements, and revised monitoring requirements. The measures must be designed to ensure that the modified*

*compensatory mitigation project provides aquatic resource functions comparable to those described in the mitigation plan objectives.*

#### *Long-Term Management*

*(1) The permit conditions or instrument must identify the party responsible for ownership and all long-term management of the compensatory mitigation project. The permit conditions or instrument may contain provisions allowing the permittee or sponsor to transfer the long-term management responsibilities of the compensatory mitigation project site to a land stewardship entity, such as a public agency, non-governmental organization, or private land manager, after review and approval by the district engineer. The land stewardship entity need not be identified in the original permit or instrument, as long as the future transfer of long-term management responsibility is approved by the district engineer.*

*(2) A long-term management plan should include a description of long-term management needs, annual cost estimates for these needs, and identify the funding mechanism that will be used to meet those needs.*

*(3) Any provisions necessary for long-term financing must be addressed in the original permit or instrument. The district engineer may require provisions to address inflationary adjustments and other contingencies, as appropriate. Appropriate long-term financing mechanisms include non-wasting endowments, trusts, contractual arrangements with future responsible parties, and other appropriate financial instruments. In cases where the long-term management entity is a public authority or government agency, that entity must provide a plan for the long-term financing of the site.*

*(4) For permittee-responsible mitigation, any long-term financing mechanisms must be approved in advance of the activity causing the authorized impacts.*

#### *2.2.1 Adaptive Management for Wetland Mitigation*

The compensatory wetland mitigation for the CR 595 project is preservation of high quality wetlands and adjacent uplands; no wetland construction or creation is proposed. The only "construction" that may be involved in the preservation area would be the closure of roads and similar activities to prohibit vehicular access. Road closures and other similar activities will be evaluated as part of the future preservation area monitoring and management. Failure of existing vehicular access restrictions or areas of new vehicular access along with recommendations for corrective actions will be reported to the MDEQ. Additionally, invasive species will be monitored. Should invasive species be identified, a proposed management plan will be prepared with recommendations for prudent actions to reduce the any infestation and limit the pathways by which invasive species are introduced.

## 2.2.2 Adaptive Management for Stream Mitigation

The proposed stream mitigation for the CR 595 project does involve construction and, therefore, the adaptive management provisions from § 230.97(c) would apply. The stream crossings on the proposed CR 595 and the reconstruction of the three existing stream crossings on other Marquette County roads that are part of the stream mitigation plan have been engineered based upon data obtained using aspects of the Stream Simulation Methodology. Therefore, substantial changes to the stream mitigation design are not anticipated. However, there will be additional stream data gathered during the preparation of the final construction plans (e.g. stream bottom pebble counts) that will help ensure attainment of performance standards.

The design of each stream crossing has been prepared with safeguards to ensure that each stream crossing will perform as intended for the life of the structure without negative impairments to the stream habitat or stream flow (i.e. hydraulics). Once built, reconstruction of a stream crossing would not be a prudent adaptive management activity due to cost and negative effects on road usage; therefore reconstruction of any given crossing is not anticipated as an appropriate adaptive management measure.

Stream mitigation measures that may be subject to adaptive management are the installed stream substrate, erosion and sedimentation control devices, and streamside plantings. Prior to construction, pebble counts will be implemented to determine the appropriate stream bottom substrate for replacement of a natural streambed inside the stream crossing structures and in stream relocations. If monitoring determines that the stream bottom in these areas is scouring or is otherwise not performing like the natural stream bottom (with similar pebble counts, for example), then analysis of the problem and formulating a solution will be accomplished according to the direction provided in § 230.97(c).

## 2.2.3 Long-Term Management for Wetland Mitigation

The long-term management of the proposed wetland preservation area will be implemented by MDNR as the third-party steward in compliance with the final management plan and conservation easement.

### 2.2.3.a. Long-Term Management Needs for Wetland Mitigation

The long-term management of the proposed wetland preservation area is anticipated to be limited due to the remote nature of the preservation area and existing high resource quality characteristics of the preservation area. The wetlands in the preservation area have high value due to the natural vegetative character of the wetlands and the relatively undisturbed condition of the wetlands

due to isolation. The most important long-term management goal for the preservation area is to limit threat pathways and to maintain the existing natural character of the wetlands.

#### 2.2.3.b. Costs of Long-Term Management

The first three years after the proposed preservation area is established are the most critical in terms of changing existing local use patterns on the property. Those local use patterns include such uses as vehicular access (including ATVs) and firewood cutting. Hunting, fishing, hiking, or gathering will not be prohibited; however, vehicular access restrictions will likely alter recreationists' use of the property. As a result, more intensive site management and monitoring is proposed for the first three years. The cost of the road closures, signage, semi-annual inspections for years 1-3, and the annual inspections thereafter have been estimated in Table 2-1.

**Table 2-1. Cost of Long-Term Management of Wetland Preservation Area**

Activity	Year 1 Cost	Year 1-3 Cost	Ongoing Annual Cost*
Closure of roads	TBD	TBD	TBD
Erect signage			
Site monitoring			
Administrative costs			
Property taxes			
Totals	TBD	TBD	TBD

\*Following Year 3

#### 2.2.3.c. Funding Mechanism for Long-Term Management

Prior to the initiation of any permitted activities, MCRC will establish an account with funding sufficient to pay for the long-term management needs of the preservation area, as defined in Table 2-1.

#### 2.2.3 Long-Term Management for Stream Mitigation

Stream mitigation includes the improvements associated with the 22 stream crossings proposed on CR 595; the East Branch Salmon Trout River restoration project; the Flopper Creek restoration project; the Halfway Creek restoration project; and the paving of critical portions of CR 510 adjacent to the Big Garlic River and Yellow Dog River to reduce sediment input into these streams.

MDEQ has jurisdiction of the subject streams. Therefore, alteration of these streams requires a permit from MDEQ, effectively protecting these streams from

direct impacts and related indirect impacts. As such, long-term management plans for stream mitigation primarily focuses on ensuring that the stream crossings and restoration projects are constructed according to plans; that the design of the stream crossings promotes or restores stream functions; and that the stream banks and streambed are stable.

The stream mitigation performance standards discussed in Section 2.3 below provide the basis for long-term monitoring of stream segments involved in the stream mitigation.

### 2.3 Measurable Performance Standards for Stream Mitigation

EPA is requiring that, prior to permit issuance, measurable performance standards for stream mitigation be specified.

Baseline stream surveys have been conducted for most of the streams on the proposed CR 595 project; surveys on the streams that have not been surveyed to establish baseline conditions will be conducted prior to the start of construction of stream mitigation projects. The primary performance standards for stream mitigation include the following:

- Stream surveys conducted according to the Procedure 51 Protocol to gather data on pH, water temperature, conductivity, and dissolved oxygen;
- Evaluation of 10 metrics to characterize stream habitat;
- Collecting and classifying aquatic macroinvertebrates, and;
- Electrofishing surveys to determine the assemblage of fish species present.

Data will be obtained on the streams to determine the stability of the stream as designed using the criteria of Stream Simulation; i.e. to determine the effectiveness of the stream crossings utilizing the Stream Simulation methodology. Surveys will be conducted to determine the following:

- Verify the slope of the stream through the new structures;
- Determine if any head-cutting is occurring in the stream;
- Evaluate the stream channel integrity within the box culvert or Conspan®;
- Evaluate the condition of the over-bank area in the stream crossing structure in regard to providing wildlife passage;
- Conduct as-built cross-section surveys of the stream and over-bank shelves in the reconstructed areas as baseline for future comparisons;
- Conduct pebble counts within the stream crossing structures to determine if stream substrate composition has changed since construction.

The stream mitigation sites will be monitored annually for a period of five years. A report will be prepared and submitted to MDEQ for each monitoring year by January 31 of the following year.

According to the EPA, the following items must be provided prior to initiation of any permitted activities:

#### 2.4 Signed Stewardship Agreement

Prior to initiation of any permitted activities MCRC shall provide a signed agreement with MDNR to serve as third-party steward of the proposed preservation area. The agreement will be in compliance with guidelines or templates provided by MDEQ and MDNR.

#### 2.5 Demonstration that Financial Assurances are in Place

Prior to initiation of any permitted activities, MCRC will provide documentation to MDEQ that financial assurances are in place to ensure construction compliance and fund the long-term management of the proposed preservation area and stream mitigation projects. The amount of the financial assurances will be determined in coordination with MDEQ and MDNR.

#### 2.6 Demonstration that Mineral Rights have been Secured

**The legal analysis activities required to assess this issue have been underway since receipt of the EPA letter. The results of those activities will be provided when the legal analysis is completed.**

### **3.0 Minimization and Compensation for Indirect and Secondary Impacts**

To minimize indirect and secondary impacts to aquatic resources from the CR 595 project and to fully demonstrate compliance with 404(b)(1) Guidelines, the items described in this section are required prior to permit issuance by MDEQ.

#### 3.1 Description of Critical Habitat and Mechanisms for Protection

Prior to permit issuance a detailed proposal describing the mechanism and locations of protected critical habitat shall be provided to MDEQ.

**MDNR is providing input on this section and the MCRC project permitting team will be working closely with MDNR to address appropriately.**

#### 3.2 Monitoring and Management Plan for Wetlands on the CR 595 Project Corridor.

Prior to permit issuance, plans for monitoring and managing wetlands along the CR 595 corridor for a minimum of 10 years shall be provided to MDEQ. These plans shall include methods to assess, manage, and mitigate for indirect impacts to aquatic

resources resulting from the addition of pollutants, fragmentation, invasive species, and changes in overall wetland and stream functions.

The proposed CR 595 project will directly impact 122 wetland complexes. These wetlands have been delineated using the US Army Corps of Engineers wetland delineation method, evaluated using the Michigan Rapid Assessment Method for Wetlands (MiRAM) and characterized using Michigan Natural Features Inventory (MNFI) habitat definitions. These wetland assessment tools provide an extensive amount of information relative to the location, functional value, vegetative community and hydrologic regime existing in each of the wetlands within the CR 595 project corridor.

### 3.2.1 Baseline Ecological Assessment

In order to monitor the wetlands within the CR 595 corridor, a Baseline Ecological Assessment will be conducted during the 2013 growing season to establish pre-construction wetland conditions. The 2013 Baseline Ecological Assessment will include review of all of the information gathered during the MDEQ permitting process, including plans prepared by Coleman Engineering, wetland delineation survey data, GIS land use mapping, hydrologic data, and habitat characterization data.

After review of available data, proposed wetland sampling plots will be established within each wetland complex. A minimum of one wetland sampling plot will be established within each wetland. Where a wetland is bisected by CR 595, wetland sampling plots will be established on both sides of the road. Botanical, hydrologic and wildlife community data will be collected at each wetland sampling plot. Global positioning system (GPS) latitude/longitude coordinates will be recorded at each sample plot. Plot data shall identify all plant species and absolute percent cover for each species within each plant stratum (i.e., woody vine, herbaceous, sapling/shrub, tree). Within a plot the herbaceous layer (all non-woody plants and woody plants less than 3.28 feet in height) will be sampled using a 3.28-foot by 3.28-foot quadrat. The shrub layer will be sampled using a 15-foot radius circular limit. The tree layer will be sampled using a 30-foot radius circular limit. The data recorded for each sample plot stratum shall include a list of all living plant species encountered and also an estimate of absolute percent cover in five percent intervals for each species, bare soil areas, and open water areas relative to the total area of the plot.

Each plot will also be a four-way photo station. Each photo station will be centered upon a botanical plot and the four photos will view the four cardinal directions. Directional photography, coupled with botanical sample plot strata data will be an efficient way to determine changes (if any) that may occur over



the short-term or long-term. The plant community data shall be collected once between May 15 and June 15 and once between August 15 and September 15.

If feasible, a piezometer will be installed at each wetland sampling plot to monitor near surface groundwater elevations. The top of casing elevation of each piezometer will be surveyed to allow groundwater elevations to be measured and easily compared. In situations where near surface bedrock exists or where other piezometer installation is not feasible, wetland hydrologic indicators will be used to document presence/absence of wetland hydrology. The near surface groundwater elevation will be measured and recorded once per month during the May 1 to September 1 growing season. Data loggers may be used to measure near surface ground water on a more frequent basis within selected wetlands. If standing water exists within a wetland, staff gages will be installed to measure surface water depths.

Wildlife observations will be documented at each wetland using a meander survey method. All sightings and evidence of wildlife species, including direct observation, tracks, scat, and songs/calls or other vocalizations will be documented within close proximity of the wetland sample plot.

A Baseline Ecological Assessment Report of the CR 595 Corridor Wetlands will be submitted to the MDEQ for review by January 31, 2014.

### 3.2.2 Invasive Species Monitoring

A detailed evaluation of the CR 595 corridor (i.e. wetlands and uplands) will be conducted during the Baseline Ecological Assessment to identify and evaluate the presence of invasive species. Because invasive species typically gain access to native habitats through human activities or habitat modification, the proposed invasive species monitoring protocol will focus on potential pathways of introduction.

The MDNR provided comments on the proposed CR 595 application for permit on May 4, 2012, including concerns about invasive species monitoring and control. In the MCRC response to MDNR dated May 30, 2012, the following commitments were made:

#### MDNR Recommendation:

- All roadside planting should be done with Michigan native grasses

MCRC will require the planting of all exposed soils will be seeded with Michigan native grasses and forbs, and will be part of the construction specifications. Straw mulch will be required to be certified weed-free and verification required as

part of the construction specifications. Importation of topsoil from other locations will not be allowed unless the topsoil is certified weed free.

MDNR Recommendation:

- Survey for and remove invasive/exotic noxious plants

MCRC has formulated the following draft plan for the monitoring of the establishment of invasive species on the CR 595 project:

1. As a preventative measure all seed mixes used on the project will be comprised of native species indigenous to the area. Exposed soils will be seeded and mulched with certified weed-free straw as soon as possible after construction is completed in each area. Stabilization with native plants will help to prevent establishment of invasive species.
2. In August of each year for a period of three years following the permanent seeding being installed, a survey will be conducted of all areas disturbed during the construction of CR 595 for the purpose of identifying any invasive plant species that may be present. The location of any occurrences will be recorded with a GPS unit and transferred onto the project plans for follow-up review.
3. Any invasive species identified will be removed or treated with herbicide, depending on the best technique for eradicating the plant species involved. Monitoring will continue after the last treatment on an area where invasive species have been removed for a period of three years.
4. A report will be prepared each year that summarizes the findings of the invasive plant survey and any treatment that was conducted.

The following protocol will be implemented to remove or limit the distribution of invasive species:

- The area(s) of infestation, severity of infestation, and the potential infestation pathways will be defined to the extent possible and reported to MDEQ;
- An Invasive Species Management Plan will be developed for MDEQ to review and approve appropriate methods to limit or remove both the invasive species and the introduction pathway. The plan may include a combination of physical removal, herbicide application, restoration plantings of native species, introduction of species that prey on the invasive species, passive trapping, and/or installation of additional signs to inform the public;

- The Invasive Species Management Plan will be implemented as soon as practicable depending on such things as the invasive species' life cycle, current stage of the invasion (e.g., a species has recently appeared or the colony is well-established), site access, regulatory agency approval, and work force availability.

The results of the Invasive Species Management Plan implementation will be provided in a report to MDEQ with recommendations for further control measures.

### 3.2.3 Annual Monitoring

The CR 595 corridor will be monitored on a yearly basis using the above-described methodology for a 10-year period. Monitoring reports will be submitted to the MDEQ on or before January 31 of the following year.

## 3.3 Long-Term Monitoring and Maintenance Plan for the Proposed Groundwater Drainage Layers and Wetland Equalization Culverts

Prior to the initiation of any permitted activities, long-term monitoring and maintenance plans for the proposed porous rock road design (i.e. groundwater drainage layers) and equalization culverts shall be completed to ensure that these structures perform as desired in the future. The draft plans are presented in the following sub-sections.

### 3.3.1 Groundwater Drainage Layer Long-Term Monitoring

There are 13 groundwater drainage layers proposed in wetlands on the CR 595 project. The sites are listed on a schedule on Detail Sheet K dated August 13, 2012 and are shown on the CR 595 project Plan & Profile Drawings. The groundwater drainage layers are designed to pass groundwater under the roadway to minimize indirect impacts to wetlands that are being crossed by the road that could be caused by elevated or reduced groundwater levels. The groundwater drainage layers are intended to keep groundwater levels the same as pre-construction.

In order to monitor the groundwater levels on the up-gradient and down-gradient sides of CR 595, water level data loggers will be installed. The data loggers record the water table elevation at specified intervals (i.e., daily, hourly, etc.) and a graphic presentation of the water table will be downloaded periodically. The data loggers will be installed in two-inch wells with screens in the water table zone, one on each side of the proposed CR 595. The wells will be set back from the road and will be protected by a treated post. The top of the well will be secured with a lock.

The data loggers will enable comparison of water tables on each side of the road and will show if there is any elevation of water table that could be attributed to the roadway. The wells and data loggers will be installed prior to road construction in order to determine baseline water table elevations.

The expected life of data loggers is approximately five years. It is proposed that the groundwater drainage layer long-term monitoring be for a period of five years after construction of the road base. This monitoring period is expected to be sufficient to:

- Determine if the groundwater drainage layers are functioning as intended (i.e. groundwater flow is not impeded by the road);
- Provide documentation of the potential cause of any noticeable impacts on the wetland plant community (as determined by the long-term monitoring of wetlands on the CR 595 corridor as discussed in Section 3.2), and;
- Determine if the groundwater drainage layer is maintaining consistent effectiveness or if any loss of function is evident.

### 3.3.2 Groundwater Drainage Layer Maintenance Plan

The groundwater drainage layers are designed to be permanent features in the base of the proposed road. Heavy geotextile fabric is used to wrap the rock to prevent the interstitial spaces of the rock from being filled with soil; the three-foot depth of the rock layer provides adequate cross-sectional area for the passage of groundwater. Detail Sheet K provides construction specifications for these groundwater drainage layers. Due to the aforementioned, maintenance of the groundwater drainage layers is not expected to be necessary.

In the event that the monitoring of groundwater tables indicate that a groundwater drainage layer is not functioning as intended, MCRC will evaluate the impacts on wetlands and prepare a report to be submitted to MDEQ that describes the problem, the implications on the wetlands, and propose a solution to the situation.

### 3.3.3 Equalization Culverts Long-Term Monitoring

There are 62 proposed wetland equalization culverts proposed under CR 595. These culverts were upsized based on recommendations received from MDEQ during the review of the application for permit from 18-inch diameter to 24-inch diameter reinforced concrete pipe. Detail Sheet K1 provides the design requirements of these wetland equalization culverts. The purpose of each

equalization culvert is to pass surface water under CR 595 in order to reduce the possibility of CR 595 impacts to wetlands as a result of alteration of wetland hydrology. Any change in wetland plant communities or wetland hydrology will be identified during the long-term monitoring of the wetlands on the CR 595 project as explained in part 3.2 above. No separate monitoring of wetland equalization culverts is proposed other than as typically performed under MCRC road maintenance procedures.

#### 3.3.4 Equalization Culverts Maintenance Plan

Due to the use of reinforced concrete pipe instead of steel culverts and due to the larger size of culverts to be installed, maintenance of the wetland equalization culverts is not expected to be necessary other than as typically performed under MCRC road maintenance procedures.

#### 3.4 Recording of Conservation Easements or Deed Restrictions to Ensure Protection of Critical Habitats.

Prior to the initiation of any permitted activities, real estate instrument(s) such as conservation easements, or deed restrictions shall be recorded to ensure the protection of critical habitat areas, including aquatic resources, from increased secondary development.

**MDNR is presently evaluating the presence of any critical habitats and will make recommendations to MDEQ and MCRC regarding treatment or recommended/proposed mitigation measures on critical habitats found within the proposed CR 595 corridor. The response to these issues will be provided after MDNR input is received on December 21.**

#### 3.5 Verification of Funding Mechanisms for Long-Term Monitoring and Management of Indirect Impacts.

Prior to the initiation of any permitted activities, funding mechanisms shall be in place for long-term monitoring and management of indirect impacts.

**MCRC will complete the description of proposed funding levels for indirect impacts after MDNR recommendations are received.**

#### 3.6 Plan for Location and Design of Wildlife Crossings.

Prior to permit issuance, MCRC is required to include the construction of wildlife crossings in its road design.

As a component of the design of the 22 proposed stream crossings on the CR 595 project, the proposed stream crossing structures were upsized not only to provide for improved hydraulics and to maintain stream integrity, but also to accommodate wildlife travel.

**MDNR is evaluating the need for wildlife crossings of CR 595. MCRC will respond to this issue in this section of the response after receiving input from MDNR on December 21.**